# Continuous filtration enables efficient increase in antibiotics production

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**Significant savings, greater yield and improved throughput – a pharmaceutical company enjoys various benefits after moving from traditional batch production to a continuous antibiotics manufacturing process. A key component that makes these improvements possible is the rotary pressure filter from BHS-Sonthofen.**

A globally operating pharmaceutical company produces a highly efficient new drug based on the traditional batch process method. The success of the new product quickly exceeds internal sales forecasts after its introduction on the market. Therefore, the company soon launches a project to increase production. The drug rapidly develops into a blockbuster, calling for a production increase that more than doubles the previous capacity.

The entire production process is analyzed as part of the extension project towards implementing an efficient increase in production quantities as quickly as possible. Rather than simply copying the old production line, project management recommends modifying the batch process by introducing a continuously operating BHS rotary pressure filter (RPF) and adding new reactors.

The project implemented as a result of this assessment increases production in the order of 150 percent, while incurring only a fraction of the investment costs of the previous manufacturing process. In addition, changing to continuous filtration increases the yield by close to a third, further improving the profitability of the new process. The key to achieving these benefits is the ability to monitor the continuous filtration and cleaning process online. This delivers a much more consistent product quality while at the same time allowing the company to reduce the number of consumables used in production.

Batch-based operation with a complex process flow, high consumable requirements and mediocre yield was turned into a self-regulating, easily controllable and highly

efficient process by putting a continuous process in place. The success of this production redesign is in large part owing to the rotary pressure filter of type RPF P02 with an active filter surface of 0.5 $m^2$.